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United States Department of State

Bureau of Political-Military Affairs
Office of Defense Trade Controls Compliance
Washington, D.C. 20522-0112

MAY 0 8 2013

In reply refer to

DTCC Case: 13-0001444

Mr. Cody Wilson Defense Distributed 711 W. 32<sup>nd</sup> Street, Apt. 115 Austin, TX 78705

Dear Mr. Wilson:

The Department of State, Bureau of Political Military Affairs, Office of Defense Trade Controls Compliance, Enforcement Division (DTCC/END) is responsible for compliance with and civil enforcement of the Arms Export Control Act (22 U.S.C. 2778) (AECA) and the AECA's implementing regulations, the International Traffic in Arms Regulations (22 C.F.R. Parts 120-130) (ITAR). The AECA and the ITAR impose certain requirements and restrictions on the transfer of, and access to, controlled defense articles and related technical data designated by the United States Munitions List (USML) (22 C.F.R. Part 121).

DTCC END is conducting a review of technical data made publicly available by Defense Distributed through its 3D printing website, DEFCAD.org, the majority of which appear to be related to items in Category I of the USML. Defense Distributed may have released ITAR-controlled technical data without the required prior authorization from the Directorate of Defense Trade Controls (DDTC), a violation of the ITAR.

Technical data regulated under the ITAR refers to information required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles, including information in the form of blueprints, drawings, photographs, plans, instructions or documentation. For a complete definition of technical data, see § 120.10 of the ITAR. Pursuant to § 127.1 of the ITAR.

it is unlawful to export any defense article or technical data for which a license or written approval is required without first obtaining the required authorization from the DDTC. Please note that disclosing (including oral or visual disclosure) or transferring technical data to a foreign person, whether in the United States or abroad, is considered an export under § 120.17 of the ITAR.

The Department believes Defense Distributed may not have established the proper jurisdiction of the subject technical data. To resolve this matter officially, we request that Defense Distributed submit Commodity Jurisdiction (CJ) determination requests for the following selection of data files available on DEFCAD.org, and any other technical data for which Defense Distributed is unable to determine proper jurisdiction:

- 1. Defense Distributed Liberator pistol
- 2. .22 electric
- 3. 125mm BK-14M high-explosive anti-tank warhead
- 4. 5.56/.223 muzzle brake
- 5. Springfield X7 40 tactical slide assembly
- 6. Sound Moderator slip on
- 7. "The Dirty Diane" 1/2-28 to 3/4-16 STP S3600 oil filter silencer adapter
- 8. 12 gauge to .22 CB sub-caliber insert
- 9. Voltlock electronic black powder system
- 10. VZ-58 front sight.

DTCC/END requests that Defense Distributed submit its CJ requests within three weeks of receipt of this letter and notify this office of the final CJ determinations. All CJ requests must be submitted electronically through an online application using the DS-4076 Commodity Jurisdiction Request Form. The form, guidance for submitting CJ requests, and other relevant information such as a copy of the ITAR can be found on DDTC's website at <a href="http://www.pmddtc.state.gov">http://www.pmddtc.state.gov</a>.

Until the Department provides Defense Distributed with final CJ determinations. Defense Distributed should treat the above technical data as ITAR-controlled. This means that all such data should be removed from public access immediately. Defense Distributed should also review the remainder of the data made public on its website to

determine whether any additional data may be similarly controlled and proceed according to ITAR requirements.

Additionally, DTCC/END requests information about the procedures Defense Distributed follows to determine the classification of its technical data, to include the aforementioned technical data files. We ask that you provide your procedures for determining proper jurisdiction of technical data within 30 days of the date of this letter to Ms. Bridget Van Buren, Compliance Specialist, Enforcement Division, at the address below:

Office of Defense Trade Controls Compliance PM/DTCC, SA-1, Room L132 2401 E Street, NW Washington, DC 20522 Phone: 202-663-3323.

We appreciate your full cooperation in this matter. Please note our reference number in any future correspondence.

Sincerely,

Glenn E. Smith

Chief, Enforcement Division

# WILLIAMS MULLEN

Jahna M. Harrwig Direct Dial: 202.293-8145 jharrwig@williamsmullen.com

June 21, 2013

Ms. Sarah Heidema U.S. Department of State Directorate of Defense Trade Controls PM/DDTC, SA-1, Room 1200 2401 E Street, NW Washington, DC 20037

Subject: Commodity Jurisdiction Requests for Data Files Posted by Defense Distributed

Enclosures:

- (1) Printouts of Drawings from Files Posted at DEFCAD.org
- (2) Wikipedia Page for 125mm BK-14M HEAT
- (3) Thingiverse Page for Sound Moderator
- (4) Thingiverse Page for VZ-58 Front Sight
- (5) Examples of Solvent Trap Adapters
- (6) Examples of CAD Files for .22 Pistols
- (7) Examples of CAD Files for Muzzle Brakes
- (8) Examples of CAD Files for Slide Assemblies
- (9) Examples of CAD Files for Voltlock System

#### Dear Ms. Heidema:

Defense Distributed has been requested by DTCC/END to submit requests for commodity jurisdiction determinations in connection with Case No. 13-0001444 for ten sets of data files posted to DEFCAD.org. As demonstrated below, the files are primarily Computer Aided Design (CAD) data files and should be considered public domain information that is excluded from the ITAR pursuant to Section 120.11. Defense Distributed therefore respectfully requests a determination that these files are not subject to the ITAR.

#### COMMODITY DESCRIPTIONS

Each of these Commodity Jurisdiction requests relates to data files, almost all of which are essentially blueprints that can be read by CAD software. A description of each file or set of files is set out below. The files are in one of the following formats:

STL (STereoLithography or Standard Tessellation Language) is a file format
native to the stereolithography CAD software and can be used with some 3D
printers. "Stereolithography" is a means of creating physical 3D models of objects
using resin or carefully cut and joined pieces of paper. STL files describe only

the surface geometry of a three dimensional object without any representation of color, texture or other common CAD model attributes.

- The IGS (Initial Graphics Exchange Specification) file format is the standard format for transferring three-dimensional models between CAD programs. IGS files can store wireframe models, surface or solid object representations, circuit diagrams, and other objects.
- SLDPRT is the proprietary image file format associated with the SolidWorks brand CAD software. SLDPRT files contain three-dimensional images of one specific part of a product.

 SKP is the CAD drawing format for Google Sketchup, which is a quick, entrylevel 3D drawing program.

There are also a small number of Word (.DOC), text (.TXT) or image (.JPG or .BMP) files. A printout of each file is attached to the relevant DS-4076.

As explained further below, each of these files either was previously placed in the public domain or contains only public domain information.

#### 1. Liberator Pistol Data Files

The files for the Liberator Pistol include sixteen STL files for the various parts and components of the pistol, two "read me" text files that explain how to lawfully assemble the pistol, a diagram of a pistol, and a permissive software license. If printed on a 3D printer, the parts could be assembled into a single shot .380 caliber firearm.

#### 2. .22 Electric Data Files

The files for the .22 Electric are two stereolithography (STL) CAD files for models of a barrel and grip for a .22 caliber pistol. If printed, the barrel would be a plastic cylinder with a .22 mm bore and the grip would be a plastic piece with two 5mm diameter holes. If those pieces were printed in plastic and used with an electronic system and firing mechanism, the barrel would be expected to fail upon firing.

# 3. 125 mm BK-14M High Explosive Anti-Tank Warhead Model Data File

The file is a STL CAD file for a model of a BK-14M high explosive anti-tank warhead without fins. The model, if printed on a 3D printer, would be a solid piece of plastic in the shape of the warhead, but would not be capable of functioning as a warhead.

#### 4. 5.56/.223 Muzzle Brake Data Files

The data files are three different CAD file formats (.IGS. .SLDPRT, and .STL) for a model of a 5.56/.223 muzzle brake. If printed on a 3D printer, the model would be a plastic piece in the shape of the muzzle brake, but would be expected to fail if used with a weapon.

### 5. Springfield XD-40 Tactical Slide Assembly Data Files

The files are nineteen Computer Aided Design (CAD) data files in the SolidWorks .SLDPRT file format for models of components of a pistol slide for the Springfield XD-40. The

components, if printed on a 3D printer, would be plastic pieces in the shape of the components of the slide assembly, but would be expected to fail if used with a weapon.

## 6. Sound Moderator - Slip On File

The file is a stereolithography CAD file for a model of a slip-on sound moderator for an air gun. The model, if printed on a 3D printer, would work with an air gun, but would likely melt if used with a firearm.

## 7. "The Dirty Diane" 1/2-28 to 3/4-16 STP S3600 Oil Filter Silencer Adapter Files

The file is a CAD data file in the SolidWorks .SLDPRT file format for a model of an oil filter silencer adapter that is typically produced in stainless steel. If printed on a 3D printer, this item could be used as a solvent trap adapter, which is used to catch solvents that are used in the process of cleaning a gun. While a metal solvent trap adapter could be used as a silencer, a plastic adapter would likely melt if used with a weapon as a silencer.

### 8. 12 Gauge to .22 CB Sub-Caliber Insert Files

The files are a SKP CAD file for a model of a sub-caliber insert, two renderings of the sub-caliber insert, and a "read me" text file providing information about the National Firearms Act and the Undetectable Firearms Act. This item, if printed on a 3D printer, would be a plastic cylinder with a .22 bore, and would be expected to fail if used with a weapon.

# 9. Voltlock Electronic Black Powder System Files

The files are twelve CAD files for models of cylinders of various bores with a touch hole. Eleven of the files are in the STL file format and one is in the IGS format. If those pieces were printed on a 3D printer and used with an electronic ignition, the barrel would be expected to fail.

## 10. VZ-58 Front Sight Files

The files are a SolidWorks CAD file in the .SLDPRT file format and a rendering of a model of a sight for a VZ-58 rifle. If printed on a 3D printer and used with a weapon, the sight would be expected to fail.

### DATA ORIGIN

With the exception of item 1 (Liberator Pistol Data Files), each of these files was provided to Defense Distributed by the creator of the files identified in the DS4076. In addition, as explained below, many of these files were originally posted to <a href="https://www.thingiverse.com">www.thingiverse.com</a> or other internet sites, and were freely available to any person with access to the internet.

The Liberator Pistol CAD files were developed by Defense Distributed. The Liberator pistol was designed as a combination of already extant and working files and concepts. The pistol frame, trigger housing, and grip specifications were all taken directly from an AR-15 lower receiver file that is in the public domain. The spring file is taken from a toy car file available on Thingiverse. The hammer relies on striking a common roofing nail, and the barrel is a cylinder bored for .380. The gun functions because of the properties of the .380 cartridge – the brass

casing itself is relied on to act as a breech. The printed and assembled gun is a simple improvised weapon, not as complex as many of the improvised weapons of the 20th century, those available in Army manuals, etc. All of the technologies used to create the Liberator data files are widely available in the public domain.

#### **IDENTICAL & SIMILAR FILES**

The Liberator Pistol data files are for an improvised firearm that is similar to and based on numerous items that are available on the internet as well as in various books. The Library of Congress online catalog lists numerous books on gunsmithing, including

- Clyde Baker, Modern gunsmithing; a manual of firearms design, construction, and remodeling for amateurs & professionals (1959)
- John E. Traister, Clyde Baker's Modern gunsmithing: a revision of the classic (1981)
- Frank de Haas, Mr. Single Shot's gunsmithing idea book (1983)
- · Roy F. Dunlop, Gunsmithing (1996),
- Franklin Fry, Gunsmithing fundamentals: a guide for professional results (1988),
- James Virgil Howe, The modern gunsmith: a guide for the amateur and professional gunsmith in the design and construction of firearms, with practical suggestions for all who like guns (1982),
- Gérard Métral, A do-it-yourself submachine gun: it's homemade, 9mm, lightweight, durable, and it'll never be on any import ban lists! (1995),
- Jack Mitchell, The Gun digest book of pistolsmithing (1980),
- J. Parrish Stelle, The gunsmith's manual; a complete handbook for the American gunsmith (1883), and
- Patrick Sweeney, Gunsmithing: pistols & revolvers (2009),

among many others. Examples of online sources include:

- http://www.weaponscombat.com/zip-pipe-and-pen-guns
- http://www.infinitearms.com/images2/v/manuals/Misc+Gun+Plans
- http://thehomegunsmith.com
- http://www.scribd.com/doc/24445441/Pen-Gun-Mk1-Blueprint
- https://www.google.com/search?q=zip+gun+blueprints&rlz=1C1SKPM\_enUS43 6US489&source=lnms&tbm=isch&sa=X&ei=9toUZybJILm8wSx0YHoBg&ved=0CAoQ\_AUoAQ&biw=1600&bih=837
- http://ebookbrowse.com/gu/guns-homemade

Although DD converted this information into CAD file format, DD does not believe that it created any new technical data for the production of the gun.

A drawing of the 125 BK-14M HEAT (Item 3), including measurements, is currently available on Wikipedia at <a href="http://en.wikipedia.org/wiki/File:125mm\_BK-14m\_HEAT.JPG">http://en.wikipedia.org/wiki/File:125mm\_BK-14m\_HEAT.JPG</a>.

The Sound Moderator CAD file (Item 6) was published on Thingiverse on March 3, 2011 and is still available on that site at <a href="http://www.thingiverse.com/thing:6808">http://www.thingiverse.com/thing:6808</a>. The VZ-58 Front Sight (Item 10) was also published to Grabcad on December 14, 2012 and is still available on that site at <a href="http://grabcad.com/library/front-sight-for-vz-dot-58-rifle">http://grabcad.com/library/front-sight-for-vz-dot-58-rifle</a>.

The Oil Filter Silencer Adapter is identical to Solvent Trap Adapters, which are produced by numerous manufacturers and available as commercial products on many websites, including amazon.com. (see <a href="http://www.amazon.com/s/ref=nb\_sb\_noss\_1?url=search-alias%3Dautomotive&field-">http://www.amazon.com/s/ref=nb\_sb\_noss\_1?url=search-alias%3Dautomotive&field-</a>

keywords=solvent+trap+adapter&rh=n%3A15684181%2Ck%3Asolvent+trap+adapter.) These items appear to be commercial products that would be subject to the EAR. As such, any related technologies or technical data would also be subject to the EAR.

Examples of CAD files similar to the .22 Electric Pistol (Item 2), Muzzle Brake (Item 4), Slide Assembly (Item 5), and Voltlock Electronic Black Powder System (Item 9) that are currently available on the internet are attached to the relevant DS4076.

As demonstrated above, all of the technical information included in the data files posted to DEFCAD.org was previously available in the public domain. As such, this information is excluded from the definition of "technical data" by 22 C.F.R. § 120.10(a)(5). For these reasons, Defense Distributed respectfully requests that the Department determine that the subject data files posted to DEFCAD.org are not subject to the ITAR.

This submission contains Defense Distributed confidential business information. We respectfully request that the submission be kept confidential. If you need additional information regarding this submission, please contact me at 202-293-8145 or jhartwig@williamsmullen.com.

Sincerely,

Jahna M. Hartwig

#### MATTHEW A. GOLDSTEIN, PLLC

1012 14TH STREET, NW, SUITE 920 WASHINGTON DC 20005

#### VIA ELECTRONIC FILING

January 2, 2015

PM/DDTC, SA-1, 12th Floor Office of Defense Trade Controls Bureau of Political Military Affairs U.S. Department of State Washington, D.C. 20522-0012

SUBJECT: Commodity Jurisdiction Request for Ghost Gunner Machine, Plastic Mounting Jig, User Instructions, and Software (Defense Distributed, Inc.,

PM/DDTC Code M-34702)

Dear Sir or Madam:

Pursuant to Section 120.4 of the International Traffic in Arms Regulations ("ITAR") (22 C.F.R. Sections 120-130), Defense Distributed requests a commodity jurisdiction determination from the Directorate of Defense Trade Controls ("DDTC") on the Ghost Gunner machine (the "Ghost Gunner"), its plastic mounting jig, user instructions, and software for production, operation, and use of the Ghost Gunner.

The Ghost Gunner is an approximately one-foot-cubed black box that uses a drill bit mounted on a head that moves in three dimensions to automatically carve digitally-modeled shapes into polymer, wood or aluminum. It functions as a 3-axis computer-numerically-controlled ("CNC") press that can be used to manufacture parts to firearms controlled under U.S. Munitions List ("USML") Category I. It can also be used to manufacture items that are not controlled under the USML. The machine was designed, developed, and manufactured by Defense Distributed to automatically manufacture publicly available designs with nearly zero user interaction.

As discussed below, the Department of Defense recommended that Defense Distributed submit this commodity jurisdiction request.

Export jurisdiction over the Ghost Gunner, Jig, software, and instructions is uncertain because, although the Department of Commerce Export Administration Regulations ("EAR") maintain a control listing for jigs, fixtures, and other metal-working items "exclusively designed for use in the manufacture of firearms" under Commerce Control List ("CCL") Export Control Number ("ECCN") 2B018.n, there is no corresponding carve-out for these items and related software and technical information otherwise controlled by USML Category I generally; and Category I(i) controls technical data and defense services directly related to firearms, with technical data directly related to the manufacture or production of firearms designated as Significant Military Equipment.

Please note that a letter from Defense Distributed authorizing my law firm to file this request was uploaded with this DS-4076 submission. Please direct any questions and all correspondence related to this request to my office. Communications to me at matthew@goldsteinpllc.com are preferred.

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#### I. BACKGROUND

#### A. Defense Distributed

Defense Distributed is a Texas corporation, registered with the Department of State under PM/DDTC Code M-34702. The company has developed technical information that can be used to produce, manufacture, and assemble various parts components, accessories, and attachments to firearms controlled under USML Category I. This includes information for the design and production of the Ghost Gunner, software necessary to operate Ghost Gunner, and code that allows production of certain items by the Ghost Gunner.<sup>1</sup>

Following notification from DDTC in May 8, 2013, that the agency requires U.S. Government prior approval before publications of otherwise ITAR-controlled technical data into the public domain (Attachment 1), Defense Distributed has submitted requests for U.S. Government clearance of technical data to the Department of Defense Office of Prepublication and Security Review ("DOPSR").<sup>2</sup> On October 1, 2014, DOPSR returned a Defense Distributed request for clearance of technical information on the Ghost Gunner for public release, stating that commodity jurisdiction over the item was uncertain and recommending that Defense Distributed submit a commodity jurisdiction request. See Attachment 2.

#### B. The Ghost Gunner

Existing CNC machines are expensive or too inaccurate to manufacture firearms for the casual user. Defense Distributed developed the Ghost Gunner to address this problem by miniaturizing the build envelope to just large enough to mill common firearm receivers, which in turn improves rigidity, reduces material cost and simultaneously relaxes certain design limits, allowing Defense Distributed to sell an inexpensive machine with more than enough accuracy to manufacture firearms.

The first design tested on the Ghost Gunner was for an AR-15 lower receiver and the Ghost Gunner was able to automatically find, align, and mill a so-called "80%" lower receiver, which was not a firearm prior to milling. The Ghost Gunner has since undergone several design revisions to reduce machine chatter, backlash, and jitter, all with the goal of keeping total design cost low.

Photographs of Ghost Gunner are provided at Attachment 3 and rendered images of the machine with the plastic jig are provided at Attachment 4.

<sup>1</sup> This commodity jurisdiction request seeks a determination of the code necessary to operate Ghost Gunner. It does not seek a determination on the various project files specific to production of certain items by the Ghost Gunner.

<sup>&</sup>lt;sup>2</sup> In complying with DDTC prepublication review requirements on publication of technical information into the public domain, Defense Distributed does not intent to, nor should it be considered to, waive any defense, claim or right under law.

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A schematic drawing for the Ghost Gunner is provided at Attachment 5.

Ghost Gunner form, fit, function, and performance characteristics include the following:

- It uses a compact, powder coated A36 steel frame and thick stainless T-slot rail, with preloaded ball bearings for maximum rigidity. Linear motion is achieved with lowbacklash direct-drive ball screws mounted in-line with the cutting surface, thus preventing torsional gantry chatter while machining.
- It incorporates an electronic probe that automatically detects when the machine comes into contact with the work piece, allowing automatic part discovery and alignment. Ghost Gunner requires conductive parts if auto-discovery and alignment are used.
- It can manually machine nonconductive materials, but this requires manual calibration
  of a part to the machine following a few simple instructions as is required with
  existing CNC machines.
- Its moving parts are entirely sealed from chip debris. All bearings are sealed and contain wipers to prevent foreign contaminate entry. The rails are stainless steel and are factory lubricated, but do require periodic wiping to prolong life. End Mills dull over time and are considered a consumable.
- To contain aluminum chips, it includes a chip collection tray and all moving components are fully enclosed.
- It is capable of manufacturing deep pockets due to its horizontal gantry, which allows
  gravity to pull chips away from the cutting surface before they can build up and dull
  the end mill, as is the case on traditional CNC designs.
- It uses industry standard ER-11 collets, and ships with both 1/4" and 5/32" collets.
- It uses a standard IEC power cord and is compatible with any 110/220V circuit. No
  external power brick is used; the machine is entirely self-contained.
- It has two ports: Power (IEC standard) and USB (Type 'B').
- Its machinable dimensions are 140 x 75 x 60mm (~5.50 x 2.95 x 2.35")
- Its maximum part dimensions are 230 x 90 x 100mm (~9.05 x 3.50 x 3.90")
- Its overall footprint is 330 x 280mm (~13 x 11")
- Its weight is 20kg (~45 pounds)

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- Its Spindle Speed is 10,000+ RPM (Final Value TBD)
- Its software requirements are Windows 7 or higher. Mac version TBD

As noted above, Ghost Gunner is capable of manufacturing more than just firearm receivers. With Defense Distributed's open source Physibles Development SDK ("pDev"), designers can distribute files via the company's '.dd' file format, which contains all installation and assembly instructions, any required jig files to hold a part in place (that users can print with a 3D printer), and all machine definitions and code to physically manufacture a particular design. To a casual user, the .dd file is a one-stop solution to manufacturing any aluminum physible that the public can design to fit into the build envelope. Defense Distributed will be developing in and supporting this format.

The .dd file format is itself open source and not constrained to the Ghost Gunner or Defense Distributed; any user can define any existing machine's specific parameters via the machine parameters list. A single file can contain specific code and installation instructions for any number of machines. A user with both a Ghost Gunner and a Tormach P1100 could manufacture a particular .dd file on either machine and manufacture the same physible with zero additional user knowledge, as only the instructions required for a particular machine are revealed to the end user. The .dd file format is a CNC response to 3D printing's universal .stl file format. However, Ghost Gunner will also accept TinyG code from any CAM program.

In operation, users provide the parts for milling. They can then simply plug their computer into the Ghost Gunner, install the Ghost Gunner software, and download any compatible .dd design file. 3D printable jigs are used to hold each part in place as each milling step is performed. For example, milling an eighty percent AR-15 lower receiver requires two jig pieces to secure the lower in place while the trigger pocket is milled, and then two more jig pieces are installed to drill the trigger pinholes. As most eighty percent firearms require deep pocket milling, Ghost Gunner's mounting table is parallel to the end mill shaft. This orientation maximizes 3D printed jig strength, minimizes jig complexity, and mechanically aligns the part to the machine upon insertion into the Maker Slide-patterned, Open Source T Slot stainless rails.

Defense Distributed expects its typical order fulfillment will contain the fully assembled Ghost Gunner CNC, plastic mounting jig designed to secure 80% AR-15 receivers, operating software and instructions. Defense Distributed also intends to place instructions and computer code needed to build and use Ghost Gunner into the public domain as Open Source technology.

Block 13 ("Sales information) is not provided with this request because the Ghost Gunner is still in development as Defense Distributed awaits arrival of various production pieces and continues to make any required changes to the product. As such, the company has not yet delivered any machines (i.e., no completed sales). However, the company has accepted 469 preorders and 413 advance deposits from prospective purchasers. Each of these orders, except for one, are intended for domestic sale. In addition, consistent with U.S. law, final sales will carry conditions that limit purchases to private use (i.e., not for commercial or military use).

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## C. User Instructions and Operating Software for the Ghost Gunner

The current draft User Instructions for the Ghost Gunner accompanies this commodity jurisdiction request at Attachment 6. It contains information on how to attach a "80%" lower receiver to Ghost Gunner, such that Ghost Gunner can mill and drill all required holes to transform the lower receiver into a firearm. Ghost Gunner presents numerous User Instructions, User Graphics, and User Selections to the operator. Ghost Gunner performs work via Calibration Code and Milling Code. Ghost Gunner also assists the user in creating 3D printable Jigs, if needed.

The software necessary to produce and operate the Ghost Gunner includes AutoDesk Inventor and a simple executable application that can interpret CNC part files and TinyG code. Additional information detailing the purpose, function, and capability of the software, as requested by DDTC's DS-4076 Commodity Jurisdiction (CJ) Guidance for Software, accompanies this commodity jurisdiction request at Attachment 7.

#### II. COMMODITY JURISDICTION STANDARD

The standard applicable to Department of State and other agency considerations of commodity jurisdiction is set forth at ITAR Section 120.3. ITAR Subsection 120.3(a) extends Department of State jurisdiction to any item that meets the criteria of a defense article described on the USML or that provides equivalent performance capabilities; and ITAR Section 120.3(b) provides that a specific article not presently described on the USML shall be determined in the future as a defense article if it provides a critical military or intelligence advantage.

#### A. Relevant USML Control Listings

Subparagraph (h) to USML Category I controls components, parts, accessories, and attachments for firearms to .50 caliber inclusive. The Ghost Gunner does not meet the Category I(h) criteria because it is not a component or part to a firearm. Rather, it is a machine that can be used for the manufacture of such articles.

Subparagraph (i) to USML Category I controls technical data, to include "software" as defined at Section 120.45(f), and defense services directly related to the firearms and components, parts, accessories, and attachments for firearms to .50 caliber inclusive. Technical data directly related to the manufacture or production of firearms controlled in Category I is designated as Significant Military Equipment.

The USML does not contain a control listing that describes items used for the manufacture of firearms. Instead, that listing is contained on the EAR Commerce Control List ("CCL") entry for ECCN 2B018.n, which controls "Jigs and fixtures and other metal-working implements or "accessories" of the kinds exclusively designed for use in the manufacture of firearms. ECCN 2D018 controls software" for the "development", "production" or "use" of equipment controlled by 2B018; and ECCN 2E018, in turn, controls "Technology" for the "use" of equipment controlled by 2B018.

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The scope of the CCL controls on firearms manufacturing equipment and technology is unclear because the EAR only controls items not described on the USML and Category I does not contain any carve-out from ITAR control for software or technology controlled under ECCNs 2D018 and 2E018. To the contrary, if literally applied, USML Category I(i) treats such technical information as Significant Military Equipment.

Because there is no specific carve-out in Category I or elsewhere in the USML for software or technology controlled by 2D018 and 2E018, it is very difficult to distinguish between technical data for the manufacture or production of firearms controlled in Category I and technology for the development, production, and use of equipment used to manufacture firearms controlled at 2D018 and 2E018. This is a primary concern of the present commodity jurisdiction request.

Nevertheless, EAR control is consistent with U.S. Implementation of Wassenaar Controls. Specifically, ECCNs 2B018, ECCN 2E018, and 2B018 are Wassenaar Arrangement-based controls, subject to the National Security reason for control and which correspond to Category 2 of the Wassenaar Arrangement List of Dual-Use Items. In fact, 2B018 is titled, "Equipment on the Wassenaar Arrangement Munitions List."

Although relevant text of the ITAR and EAR control listings lack clarity, it appears that the U.S. Government decided to implement export controls on firearms manufacturing equipment and associated technical information in the EAR when it first implemented the Wassenaar Arrangement controls for such items. Accordingly, Defense Distributed believes that the Ghost Gunner does not meet criteria of a defense article described on the USML and that it does not provide equivalent performance capabilities to an article described on the USML.

Defense Distributed further notes that the DDTC should consider amending USML Category I to provide an express carve-out for EAR items controlled under ECCNs 2B018.n, ECCN 2E018, and 2B018. Alternatively, if DDTC intends to control firearms manufacturing equipment under the USML, it should make this clear in the regulations. Towards this end, any determination on the instant request that imposes ITAR control should be widely disseminated and shared with the firearms manufacturing industry.

### B. Ghost Gunner Does Not Provide a Critical Military or Intelligence Advantage.

As noted above, ITAR Section 120.3(b) provides that a specific article not presently described on the USML shall be determined in the future as a defense article if it provides a critical military or intelligence advantage.

The function and performance of the Ghost Gunner does not provide a critical military or intelligence advantage. Rather, it is essentially a jig press based on a simple design that is easily replicated by any skilled machinist. In fact, the Ghost Gunner can be produced by persons with no formal engineering background.

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In addition, Ghost Gunner builds on technology readily available in the Open Source community, including the gshield 3 axis motion hardware (http://synthetos.myshopify.com/products/gshield-v5), the grbl g-code parser and motion controller (https://github.com/grbl/grbl), and the Arduino microcontroller (http://arduino.cc).

Further, instructions and/or electronic files for production of jig presses with similar form, fit, and function to the Ghost Gunner are publicly available for download at a variety of web addresses, to include the following:

http://aresarmor.com/store/Item/Polymer-80-Black

http://www.thingiverse.com/thing:160266

https://github.com/DefiantCad/defcad-repo/tree/master/Rifles/AR-

15 80 percent lower v5-shadowfall/AR-15 80 percent Lower Drill Jig v1-Shadowfall

http://www.advancedrifles.com/3d-printed-jig-version-2-0/

http://www.80percentarms.com/products/80-ar-15-easy-jig

http://www.sierranevadaarms.com/jig.pdf

http://www.rockethub.com/projects/24384-80-lower-receiver-ar15-ar10-rudius-1911

#### III. CONCLUSION

Considering the apparent intent of the U.S. Government in implementing relevant Wassenaar Arrangement controls in the EAR, Defense Distributed believes that the Ghost Gunner does not meet the criteria of an article described on the USML. In addition, the Ghost Gunner does not provide a critical military or intelligence advantage. Accordingly, Defense Distributed respectfully requests that the Department of State issue a commodity jurisdiction determination stating that the Ghost Gunner, its plastic mounting jig, operating software, and production and operation instructions do not meet the criteria of ITAR 120.3 and are subject to Department of Commerce jurisdiction under the EAR.

Defense Distributed authorizes the release for general publication of the information contained in Block 5 of the DS-4076 Form. However, other information in this request and documents submitted with Defense Distributed's DS-4076 Submission contain sensitive business information that is proprietary, confidential, and exempt from disclosure under the Freedom of Information Act, 5 U.S.C. Section 552, and is also protected under the Trade Secrets Act, 18 U.S.C. Section 1905. Accordingly, pursuant to ITAR Section 130.15, Defense Distributed requests that information in this submission other than that contained in Block 5 be withheld in the event of a request for its disclosure.

Commodity Jurisdiction Request January 2, 2015 Page 8 of 9

Thank you for your prompt attention to this matter and please contact me at 202-550-0040 or at matthew@goldsteinpile.com if any additional information is needed.

Matthew A. Goldstein
Legal Counsel

#### COMPANY CERTIFICATION:

Cody Wilson, the Principal of Defense Distributed, certifies that he is the duly authorized representative of Defense Distributed; and that in such capacity, he certifies that he has carefully read the foregoing Commodity Jurisdiction request; and that the contents of the request are true and correct to the best of his knowledge, information and belief after reasonable inquiry into the matters discussed.

ignature D

## ATTACHMENTS TO LETTER OF EXPLANATION:

Attachment 1 May 8, 2013 DDTC Letter to Defense Distributed

Attachment 2 October 1, 2014 DOPSR Letter to Defense Distributed

Attachment 3 Photographs of Ghost Gunner Machine

Attachment 4 Rendered Images of Ghost Gunner Machine

Attachment 5 Ghost Gunner Schematics

Attachment 6 Ghost Gunner User Instructions

Answers to DS-4076 Commodity Jurisdiction (CJ) Guidance for Software

www.GoldsteinPLLC.com

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Commodity Jurisdiction Request January 2, 2015 Page 9 of 9

# OTHER ATTACHMENTS INCLUDED WITH DS-4076 SUBMISSION:

DD\_DS4076.pdf

DD Attorney Authorization Letter Block 2-1.pdf

[Instant document] DD\_Cover\_Ltr\_Block\_6-1.pdf

DD\_Certification\_Block\_19-1.pdf

# 



United States Department of State

Bureau of Political-Military Affairs Directorate of Defense Trade Controls Washington, D.C. 20522-0112

In Reply refer to DDTC Case CJ 1083-14 (RE-ISSUE) APR 1 5 2015

YOUR SUBMISSION DATED: January 2, 2015

COMMODITY JURISDICTION DETERMINATION FOR: Ghost Gunner Machine, Plastic Mounting Jig, User Instructions, and Software

The product described in your submission is a one cubic foot box that functions as a 3-axis, computer-numerically-controlled (CNC) press capable of automatically milling parts out of various materials through software designs.

A technical review of your commodity jurisdiction (CJ) request has been concluded by the requisite agencies of the United States Government. A split jurisdiction determination of this request has been determined, as follows:

The Department of State has determined that the Ghost Gunner, its plastic mounting jig, operating software, and production and operation instructions are not subject to the jurisdiction of the Department of State. However, export may require authorization from the Department of Commerce (DOC). Please consult the DOC Office of Exporter Services at (202) 482-4811 to make a Classification Request (CCATS) and satisfy other applicable requirements prior to export.

The Department of State has determined that the project files, data files, or any form of technical data for producing a defense article, including an 80% AR-15 lower receiver, are subject to the jurisdiction of the Department of State in accordance with the International Traffic in Arms Regulations (ITAR) (22 CFR 120 through 130). They are

Continued on Page Two

Cody R. Wilson
Defense Distributed, Inc.
1101 W 34<sup>th</sup> Street, #340
Austin, TX 78705
crw@defdist.org

Page Two

In Reply refer to DDTC Case CJ 1083-14

designated as technical data under Category I(i) of the United States Munitions List (USML). A license or other approval is required pursuant to the ITAR prior to any export or temporary import.

Should you not agree with this determination and have additional facts not included in the original submission, you may submit a new CJ request. If you do not agree with this determination and have no additional facts to present, you may request that this determination be reviewed by the Deputy Assistant Secretary of State for Defense Trade Controls.

Should you require further assistance on this matter, please contact Samuel Harmon at (202) 663-2811 or HarmonSC@state.gov.

Sincerely,

C. Edward Peartree

Director

Office of Defense Trade Controls Policy

Cc: Matthew A. Goldstein 1012 14<sup>th</sup> Street, NW, Suite 620 Washington, DC 20005 matthew@goldsteinpllc.com

# Coase 21.95 to 000352 Rep Decument 39-1 Filed 00/00/19 Page 95 of 709



In Reply refer to DDTC Cases CJ 651-13 through 660-13 United States Department of State

Bureau of Political-Military Affairs Directorate of Defense Trade Controls Washington, D.C. 20522-0112

JUN 0 4 2015

YOUR SUBMISSION DATED: June 21, 2013

COMMODITY JURISDICTION DETERMINATIONS FOR: Liberator Pistol Data Files, .22 Electric Data Files, 125 mm BK-14M High Explosive Anti-Tank Warhead Model Data File, 5.56/.223 Muzzle Brake Data Files, Springfield XD-40 Tactical Slide Assembly Data Files, Sound Moderator - Slip On Data File, "The Dirty Diane" Oil Filter Silencer Adapter Data File, 12 Gauge to .22 CB Sub-Caliber Insert Data Files, Voltlock Electronic Black Powder System Data Files, and VZ-58 Front Sight Data Files

The data described in your submission are Computer Aided Design (CAD) data files that can be used in a 3D printer to produce physical models of the associated item.

A technical review of your commodity jurisdiction (CJ) request has been concluded by requisite agencies of the United States Government. The findings of that technical review are:

The Department of State has determined that the 125 mm BK-14M High Explosive Anti-Tank Warhead Model Data File, Sound Moderator - Slip On Data File, and "The Dirty Diane" Oil Filter Silencer Adapter Data File are not subject to the jurisdiction of the Department of State. The Department of Commerce (DOC) advises that these items are classified as EAR99. Please consult the DOC Office of Exporter Services at (202) 482-4811 to satisfy applicable requirements prior to export.

The Department of State has determined that the Voltlock Electronic Black Powder System Data Files are not subject to the jurisdiction of the

Continued on Page Two

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crw@defdist.org

Page Two

In Reply refer to DDTC Cases CJ 651-13 through 660-13

Department of State. However, export may require authorization from the Department of Commerce (DOC). Please consult the DOC Office of Exporter Services at (202) 482-4811 to make a Classification Request (CCATS) and satisfy other applicable requirements prior to export.

The Department of State has determined that the Liberator Pistol Data Files, .22 Electric Data Files, 5.56/.223 Muzzle Brake Data Files, Springfield XD-40 Tactical Slide Assembly Data Files, 12 Gauge to .22 CB Sub-Caliber Insert Data Files (except for "read me" text file), and VZ-58 Front Sight Data Files are subject to the jurisdiction of the Department of State in accordance with the International Traffic in Arms Regulations (ITAR) (22 CFR 120 through 130). They are designated as technical data under Category I(i) of the United States Munitions List (USML) pursuant to §120.10 of the ITAR. A license or other approval is required pursuant to the ITAR prior to any export or temporary import.

Should you not concur with this determination and have additional facts not included in the original submission, you may submit a new CJ request. If you do not concur with this determination and have no additional facts to present, then you may request that this determination be reviewed by the Deputy Assistant Secretary of State for Defense Trade Controls.

Should you require further assistance on this matter, please contact Sam Harmon at (202) 663-2811 or HarmonSC@state.gov.

Sincerely

C. Edward Peartree

Director

Office of Defense Trade Controls Policy

Cc: Matthew A. Goldstein 1012 14th Street, NW, Suite 620 Washington, DC 20005 matthew@goldsteinpllc.com



hearing," which are conducted pursuant to the provisions of 5 U.S.C. 556 and 557. The CSA sets forth the criteria for scheduling a drug or other substance and for removing a drug or substance from the schedules of controlled substances. Such actions are exempt from review by the Office of Management and Budget (OMB) pursuant to section 3(d)(1) of Executive Order 12866 and the principles reaffirmed in Executive Order 13563.

#### Executive Order 12988

This regulation meets the applicable standards set forth in sections 3(a) and 3(b)(2) of Executive Order 12988 Civil Justice Reform to eliminate drafting errors and ambiguity, minimize litigation, provide a clear legal standard for affected conduct, and promote simplification and burden reduction.

#### Executive Order 13132

This rulemaking does not have federalism implications warranting the application of Executive Order 13132. The rule does not have substantial direct effects on the States, on the relationship between the Federal Government and the States, or the distribution of power and responsibilities among the various levels of government.

#### Executive Order 13175

This rule does not have tribal implications warranting the application of Executive Order 13175. This rule does not have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

#### Regulatory Flexibility Act

The Administrator, in accordance with the Regulatory Flexibility Act (5 U.S.C. 601-612) (RFA), has reviewed this proposed rule and by approving it certifies that it will not have a significant economic impact on a substantial number of small entities. The purpose of this rule is to remove [123I]ioflupane from the list of schedules of the CSA. This action will remove regulatory controls and administrative, civil, and criminal sanctions applicable to controlled substances for handlers and proposed handlers of [1231]ioflupane. Accordingly, it has the potential for some economic impact in the form of cost savings.

If finalized, the proposed rule will affect all persons who would handle, or propose to handle, [123I]ioflupane. Due to the wide variety of unidentifiable and

unquantifiable variables that potentially could influence the distribution and administration rates of new molecular entities, the DEA is unable to determine the number of entities and small entities which might handle [123I]ioflupane.

Although the DEA does not have a reliable basis to estimate the number of affected entities and quantify the economic impact of this proposed rule, a qualitative analysis indicates that, if finalized, this rule is likely to result in some cost savings for the healthcare industry. The affected entities will continue to meet existing Federal and/ or state requirements applicable to those who handle radiopharmaceutical substances, including licensure, security, recordkeeping, and reporting requirements, which in many cases are more stringent than the DEA's requirements. However, the DEA estimates cost savings will be realized from the removal of the administrative. civil, and criminal sanctions for those entities handling or proposing to handle [123I]ioflupane, in the form of saved registration fees, and the elimination of additional physical security, recordkeeping, and reporting requirements.

Because of these facts, this rule will not result in a significant economic impact on a substantial number of small entities.

#### Unfunded Mandates Reform Act of 1995

On the basis of information contained in the "Regulatory Flexibility Act" section above, the DEA has determined and certifies pursuant to the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1501 et seq., that this action would not result in any federal mandate that may result "in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100,000,000 or more (adjusted for inflation) in any one year \* \* \*." Therefore, neither a Small Government Agency Plan nor any other action is required under provisions of UMRA.

#### Paperwork Reduction Act

This action does not impose a new collection of information requirement under the Paperwork Reduction Act, 44 U.S.C. 3501–3521. This action would not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

### List of Subjects in 21 CFR part 1308

Administrative practice and procedure, Drug traffic control, Reporting and recordkeeping requirements.

For the reasons set out above, 21 CFR part 1308 is proposed to be amended to read as follows:

# PART 1308—SCHEDULES OF CONTROLLED SUBSTANCES

■ 1. The authority citation for 21 CFR part 1308 continues to read as follows:

Authority: 21 U.S.C. 811, 812, 871(b), unless otherwise noted.

■ 2. In § 1308.12, revise paragraph (b)(4) to read as follows:

#### § 1308.12 Schedule II.

(b) \* \* \*

(4) Coca leaves (9040) and any salt, compound, derivative or preparation of coca leaves (including cocaine (9041) and ecgonine (9180) and their salts, isomers, derivatives and salts of isomers and derivatives), and any salt, compound, derivative, or preparation thereof which is chemically equivalent or identical with any of these substances, except that the substances shall not include:

(i) Decocainized coca leaves or extraction of coca leaves, which extractions do not contain cocaine or ecgonine; or

(ii) [123I]ioflupane.

Dated: May 6, 2015.

Michele M. Leonhart,

Administrator.

[FR Doc. 2015-13455 Filed 6-2-15; 8:45 am]

BILLING CODE 4410-09-P

#### DEPARTMENT OF STATE

22 CFR Parts 120, 123, 125, and 127

[Public Notice 9149]

RIN 1400-AD70

International Traffic in Arms: Revisions to Definitions of Defense Services, Technical Data, and Public Domain; Definition of Product of Fundamental Research; Electronic Transmission and Storage of Technical Data; and Related Definitions

AGENCY: Department of State.
ACTION: Proposed rule.

SUMMARY: As part of the President's Export Control Reform (ECR) initiative, the Department of State proposes to amend the International Traffic in Arms

Regulations (ITAR) to update the definitions of "defense article," "defense services," "technical data,"
"public domain," "export," and
"reexport or retransfer" in order to clarify the scope of activities and information that are covered within these definitions and harmonize the definitions with the Export Administration Regulations (EAR), to the extent appropriate. Additionally, the Department proposes to create definitions of "required," "technical data that arises during, or results from, fundamental research," "release," "retransfer," and "activities that are not exports, reexports, or retransfers" in order to clarify and support the interpretation of the revised definitions that are proposed in this rulemaking. The Department proposes to create new sections detailing the scope of licenses, unauthorized releases of information, and the "release" of secured information, and revises the sections on "exports" of "technical data" to U.S. persons abroad. Finally, the Department proposes to address the electronic transmission and storage of unclassified "technical data" via foreign communications infrastructure. This rulemaking proposes that the electronic transmission of unclassified "technical data" abroad is not an "export," provided that the data is sufficiently secured to prevent access by foreign persons. Additionally, this proposed rule would allow for the electronic storage of unclassified "technical data" abroad, provided that the data is secured to prevent access by parties unauthorized to access such data. The revisions contained in this proposed rule are part of the Department of State's retrospective plan under Executive Order 13563 first submitted on August 17, 2011.

DATES: The Department of State will accept comments on this proposed rule until August 3, 2015.

ADDRESSES: Interested parties may submit comments within 60 days of the date of publication by one of the following methods:

 Email: DDTCPublicComments@ state.gov with the subject line, "ITAR Amendment—Revisions to Definitions; Data Transmission and Storage."

 Internet: At www.regulations.gov, search for this notice by using this rule's RIN (1400-AD70).

Comments received after that date may be considered, but consideration cannot be assured. Those submitting comments should not include any personally identifying information they do not desire to be made public or information for which a claim of confidentiality is asserted because those comments and/or transmittal emails will be made available for public inspection and copying after the close of the comment period via the Directorate of Defense Trade Controls Web site at www.pmddtc.state.gov. Parties who wish to comment anonymously may do so by submitting their comments via www.regulations.gov, leaving the fields that would identify the commenter blank and including no identifying information in the comment itself. Comments submitted via www.regulations.gov are immediately available for public inspection.

FOR FURTHER INFORMATION CONTACT: Mr. C. Edward Peartree, Director, Office of Defense Trade Controls Policy, Department of State, telephone (202) 663–1282; email DDTCResponseTeam@state.gov. ATTN: ITAR Amendment—Revisions to Definitions; Data Transmission and Storage. The Department of State's full retrospective plan can be accessed at http://www.state.gov/documents/organization/181028.pdf.

SUPPLEMENTARY INFORMATION: The Directorate of Defense Trade Controls (DDTC), U.S. Department of State, administers the International Traffic in Arms Regulations (ITAR) (22 CFR parts 120 through 130). The items subject to the jurisdiction of the ITAR, i.e., "defense articles" and "defense services," are identified on the ITAR's U.S. Munitions List (USML) (22 CFR 121.1). With few exceptions, items not subject to the export control jurisdiction of the ITAR are subject to the jurisdiction of the Export Administration Regulations ("EAR." 15 CFR parts 730 through 774, which includes the Commerce Control List (CCL) in Supplement No. 1 to part 774), administered by the Bureau of Industry and Security (BIS), U.S. Department of Commerce. Both the ITAR and the EAR impose license requirements on exports and reexports. Items not subject to the ITAR or to the exclusive licensing jurisdiction of any other set of regulations are subject to the EAR.

BIS is concurrently publishing comparable proposed amendments (BIS companion rule) to the definitions of "technology," "required," "peculiarly responsible," "published," results of "fundamental research," "export," "reexport," "release," and "transfer (incountry)" in the EAR. A side-by-side comparison on the regulatory text proposed by both Departments is available on both agencies' Web sites: www.pmddtc.state.gov and www.bis.doc.gov.

#### 1. Revised Definition of Defense Article

The Department proposes to revise the definition of "defense article" to clarify the scope of the definition. The current text of § 120.6 is made into a new paragraph (a), into which software is added to the list of things that are a "defense article" because software is being removed from the definition of "technical data." This is not a substantive change.

A new § 120.6(b) is added to list those items that the Department has determined should not be a "defense article," even though they would otherwise meet the definition of "defense article." All the items described were formerly excluded from the definition of "technical data" in § 120.10. These items are declared to be not subject to the ITAR to parallel the EAR concept of "not subject to the EAR" as part of the effort to harmonize the ITAR and the EAR. This does not constitute a change in policy regarding these items or the scope of items that are defense articles.

#### 2. Revised Definition of Technical Data

The Department proposes to revise the definition of "technical data" in ITAR § 120.10 in order to update and clarify the scope of information that may be captured within the definition. Paragraph (a)(1) of the revised definition defines "technical data" as information "required" for the "development," "production," operation, installation, maintenance, repair, overhaul, or refurbishing of a "defense article," which harmonizes with the definition of "technology" in the EAR and the Wassenaar Arrangement. This is not a change in the scope of the definition, and additional words describing activities that were in the prior definition are included in parentheticals to assist exporters.

Paragraph (a)(1) also sets forth a broader range of examples of formats that "technical data" may take, such as diagrams, models, formulae, tables, engineering designs and specifications, computer-aided design files, manuals or documentation, or electronic media, that may constitute "technical data." Additionally, the revised definition includes certain conforming changes intended to reflect the revised and newly added defined terms proposed elsewhere in this rule.

The proposed revised definition also includes a note clarifying that the modification of the design of an existing item creates a new item and that the "technical data" for the modification is "technical data" for the new item.

Paragraph (a)(2) of the revised definition defines "technical data" as also including information that is enumerated on the USML. This will be "technical data" that is positively described, as opposed to "technical data" described in the standard catch-all "technical data" control for all "technical data" directly related to a "defense article" described in the relevant category. The Department intends to enumerate certain controlled "technical data" as it continues to move the USML toward a more positive control list.

Paragraph (a)(3) of the revised definition defines "technical data" as also including classified information that is for the "development,"
"production," operation, installation,
maintenance, repair, overhaul, or refurbishing of a "defense article" or a 600 series item subject to the EAR. Paragraph (a)(5) of the revised definition defines "technical data" as also including information to access secured "technical data" in clear text, such as decryption keys, passwords, or network access codes. In support of the latter change, the Department also proposes to add a new provision to the list of violations in § 127.1(b)(4) to state that any disclosure of these decryption keys or passwords that results in the unauthorized disclosure of the "technical data" or software secured by the encryption key or password is a violation and will constitute a violation to the same extent as the "export" of the secured information. For example, the "release" of a decryption key may result in the unauthorized disclosure of multiple files containing "technical data" hosted abroad and could therefore constitute a violation of the ITAR for each piece of "technical data" on that server.

Paragraph (b) of the revised definition of "technical data" excludes non-proprietary general system descriptions, information on basic function or purpose of an item, and telemetry data as defined in Note 3 to USML Category XV(f) (§ 121.1). Items formerly identified in this paragraph, principles taught in schools and "public domain" information, have been moved to the new ITAR § 120.6(b).

The proposed definition removes software from the definition of "technical data." Specific and catch-all controls on software will be added elsewhere throughout the ITAR as warranted, as it will now be defined as a separate type of "defense article."

#### 3. Proposed Definition of Required

The Department proposes a definition of "required" in a new § 120.46. "Required" is used in the definition of "technical data" and has, to this point,

been an undefined term in the ITAR.
The word is also used in the controls on technology in both the EAR and the Wassenaar Arrangement, as a defined term, which the Department is now proposing to adopt:

. . . [O]nly that portion of [technical data] that is peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions. Such required [technical data] may be shared by different products.

The proposed definition of "required" contains three notes. These notes explain how the definition is to be applied.

Note 1 provides that the definition explicitly includes information for meeting not only controlled performance levels, but also characteristics and functions. All items described on the USML are identified by a characteristic or function. Additionally, some descriptions include a performance level. As an example, USML Category VIII(a)(1) controls aircraft that are "bombers" and contains no performance level. The characteristic of the aircraft that is controlled is that it is a bomber, and therefore, any "technical data" peculiar to making an aircraft a bomber is "required."

Note 2 states that, with the exception of "technical data" specifically enumerated on the USML, the jurisdictional status of unclassified "technical data" is the same as that of the commodity to which it is directly related. Specifically, it explains that "technical data" for a part or component of a "defense article" is directly related to that part or component, and if the part or component is subject to the EAR, so is the "technical data."

Note 3 establishes a test for determining if information is peculiarly responsible for meeting or achieving the controlled performance levels. characteristics or functions of a "defense article." It uses the same catchand-release concept that the Department implemented in the definition of "specially designed." It has a similarly broad catch of all information used in or for use in the "development," "production," operation, installation, maintenance, repair, overhaul, or refurbishing of a "defense article." It has four releases that mirror the "specially designed" releases, and one reserved paragraph for information that the Department determines is generally insignificant. The first release is for information identified in a commodity jurisdiction determination. The second release is reserved. The third release is for information that is identical to information used in a non-defense

article that is in "production," and not otherwise enumerated on the ITAR. The fourth release is for information that was developed with knowledge that it is for both a "defense article" and a non-defense article. The fifth release is information that was developed for general purpose commodities.

In the companion rule, BIS proposes to make Note 3 into a stand-alone definition for "peculiarly responsible" as it has application outside of the definition of "required." The substance of Note 3 and the BIS definition of "peculiarly responsible" are identical. DDTC asks for comments on the placement of this concept.

# 4. Proposed Definitions of Development and Production

The Department proposes to add § 120.47 for the definition of "development" and § 120.48 for the definition of "production." These definitions are currently in Notes 1 and 2 to paragraph (b)(3) in § 120.41, the definition of "specially designed." Because "technical data" is now defined, in part, as information "required" for the "development" or "production" of a "defense article," and these words are now used in the definition of a "defense service," it is appropriate to define these terms. The adoption of these definitions is also done for the purpose of harmonization because these definitions are also used in the EAR and by the Wassenaar Arrangement.

#### 5. Revised Definition of Public Domain

The Department proposes to revise the definition of "public domain" in ITAR § 120.11 in order to simplify, update, and introduce greater versatility into the definition. The existing version of ITAR § 120.11 relies on an enumerated list of circumstances through which "public domain" information might be published. The Department believes that this definition is unnecessarily limiting in scope and insufficiently flexible with respect to the continually evolving array of media, whether physical or electronic, through which information may be disseminated.

The proposed definition is intended to identify the characteristics that are common to all of the enumerated forms of publication identified in the current rule—with the exception of ITAR § 120.11(a)(8), which is addressed in a new definition for "technical data that arises during, or results from, fundamental research"—and to present those common characteristics in a streamlined definition that does not require enumerated identification